

Remarks/Arguments

United States Application No. 09/528,396 contained claims 1-35. Claims 1-14 were allowed and issued in United States Patent No. 6,409,493, directed at an apparatus for forming a thin shell having an inner and an outer layer. Claims 15-35 were then the subject of United States Application No. 10/138,630. Claims 15-24 were allowed as United Patent No. 6,709,619, directed at the method of forming a thin shell having an inner and an outer layer. Claims 25-35 were then made the subject for the presently pending United States Application No. 10/797,247, directed at a thin shell for an automotive panel comprising an inner and an outer layer comprising a first and a second polymer material.

Claims 25-35 remain pending. Claims 25, 26, 27, 28, 32 and 35 have been amended as discussed more fully below.

In the Office Action mailed July 20, 2004, the Examiner rejected claims 25-35 under USC 112, second paragraph as being indefinite regarding the meaning of the word "thin".

The description of the present application addresses this at several locations, e.g., at page 8, lines 10-12, where it recites that "the outer layer comprises an average thickness in a range between and including 0.005 inches to 0.025 inches". In addition, at page 18 lines 15-23, the description further points out that more preferably the outer layer 76 has a range between 0.010 inches and 0.020 inches. The specification then goes on to instruct that "[h]owever, it has been found that as the average thickness decreases below 0.040 inches, removal from the mold surface 31 without permanent deformation of the shell is made more difficult".

Thus, the thickness of the combined inner and outer layers are clearly and unambiguously described, first with representative numerical values, together with the caveat that one must not make the shell with a thickness such that upon removal from the mold,

permanent deformation would occur thereby making the shell unsuitable for use in an automotive trim panel. That being the case, it is respectfully submitted that the requirements of 35 USC 112, second paragraph, have been fully satisfied.

In addition, consistent with the above, Applicant respectfully notes that this term was employed in U.S. Patent Nos. 6,049,493 and 6,709,619 and that said term was found clear and unambiguous and in compliance with 35 USC 112.

Applicants note that claims 25, 28, 32 and 35 have been amended to remove the language that the inner layer be concealed from view “by the vehicle occupants”. It is not believed that this limitation is necessary, the point being that the present invention contemplates that the inner layer simply be concealed from view, regardless of who (vehicle occupants or otherwise) might be viewing the subject shell when placed on an automotive trim panel. No new matter has been entered. Support can be found at page 19, lines 14-18, wherein it is emphasized that the invention recognizes that the inner layer need not necessarily contribute to the appearance of the outer layer given that the inner layer is applied to the inner or class B surface of the outer layer 76.

Minor clerical corrections have been made to claims 26 and 27.

Turning to the 35 USC 102(b) rejection, the Examiner has rejected claims 25, 26, 28 and 32-35 as being anticipated by Papendick, et al. (United States Patent No. 5,037,680).

The present invention is directed at a thin shell for an automotive trim panel comprising an outer layer and an inner layer in which the inner layer is concealed from view and the outer layer covers and conceals the inner layer. Further, the **inner layer** may, at least partially, comprise a formed article prior to its present use (e.g., a recycled, reclaimed or reground polymer material) – claim 25; may comprise a mixture of two different polymer formulations –

claim 28; and may comprise a polymer formulation that is more susceptible to ultraviolet degradation than the polymer of the outer layer – claim 32.

The **outer layer** may also comprise an average thickness between and including 0.005 to 0.025 inches – claim 35.

Papendick, et al. (United States Patent No. 5,037,680) does not teach or suggest any of these various claimed inventions. Papendick, et al. is directed at an **exterior** automotive component of large size comprising a substrate of **thermoplastic olefin composition** having a **coating of clear material**. Since the outer layer is a **coating of clear material**, the **inner layer (TPO) will not be concealed from view**. In that regard, Applicants notes that the Examiner argued that the earlier claim limitation that the inner layer be concealed from view by the vehicle occupants was somehow met by the U.S. '680 reference. This was not fully understood, but more basically, assuming the misunderstanding of the Examiner's argument lies with Applicant, the amended claim herein is believed to "clearly" recite an element that is simply not present in the art of record.

Furthermore, in the U.S. '680 reference, the bumper, covered by a **clear coating** of material, would be seen by the occupants of a vehicle. Thus, it is believed that the present invention, in reciting that the inner layer is concealed from view, is not disclosed or suggested by the U.S. '680 reference. In fact, it is respectfully submitted that the U.S. '680 reference teaches away from such feature, when using a **clear coating** so that the color on the bumper is visible.

Furthermore, the art of record also does not teach or suggest that the inner layer (TPO) may comprise a previously formed article (recycle, regrind, reclaim) as a portion thereof, or a mixture of **two different** polymer formulations.

In addition, while the reference does disclose that the inner layer (TPO) may include an ultraviolet radiation deterioration preventing agent and that the clear coating may include an ultraviolet radiation screening agent, the reference does not teach or suggest that the inner layer may be more susceptible to ultraviolet radiation than the outer layer. See dependent claim 33 which recites the use of one polymer formulation (for the inner layer) which is more susceptible to ultraviolet degradation than the polymer material of the outer layer. Again, the outer layer (clear coating) of Papendick, et al is present to provide enhanced luster and mar resistance and is not intended to conceal an inner layer, much less an inner layer having less resistance ultraviolet radiation.

With regard to the 35 USC 103(a) rejection, the Examiner has indicated that claims 27 and 29-31 are rejected for obviousness over Papendick, et al. ('680). Applicant first incorporates by reference the arguments noted above, where it was pointed out that Papendick et al ('680) did not disclose or suggest the feature of concealing an inner layer by an outer layer for a shell for an automotive trim panel, where the inner layer is sourced from a polymer material which was a formed article prior to its use as a inner layer. In fact, it is respectfully submitted the concept of making use of a polymer material which was a formed article for a shell for an automotive trim panel is not remotely disclosed or suggested by the U.S. '680 reference. See again, pending claim 25.

Dependent claim 27 is further and more specifically directed at the inner layer comprising polymer regrind, reclaimed polymer or recycled polymer material. This is not taught nor suggested by Papendick, et al. perhaps because the use of such materials may provide reduced performance, as the bumper of Papendick, et al. is visible and therefore

degradable through the clear coating. Applicant's invention considers this by concealing the inner layer from view.

In other words, Papendick does not contemplate the use of, e.g. recycled material for the bumper, since the bumper is clear coated, and the bumper apparently must be of high quality virgin material that is UV stabilized.

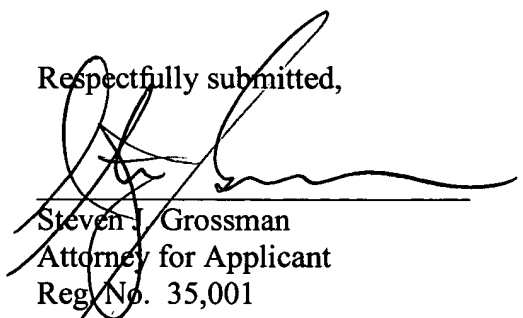
With respect to dependent claim 29-31, Applicant incorporates by reference the arguments noted above for independent claim 28. Accordingly, for the reasons noted above with respect to claim 28, it is believed that claims 29-31 are similarly in condition for allowance.

In consideration of the amendments and remarks hereinabove, Applicants respectfully submits that all claims currently pending in the application are in condition for reexamination. Allowance at an early date is respectfully solicited.

In the event the Examiner deems personal contact is necessary, please contact the undersigned attorney at (603) 668-6560.

In the event there are any fee deficiencies or additional fees are payable, please charge them (or credit any overpayment) to our Deposit Account No. 50-2121.

Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the United States Postal Service First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on October 12, 2004, at Manchester, New Hampshire.

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